

P20

DETERMINATION OF THE BOND DISSOCIATION ENERGY

D($t\text{-C}_4\text{F}_9\text{-I}$)

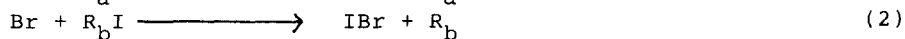
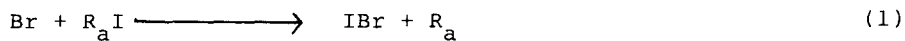
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The reactions



where $\text{R}_a = t\text{-C}_4\text{F}_9\text{I}$, $\text{R}_b = i\text{-C}_3\text{F}_7\text{I}$ or $n\text{-C}_3\text{F}_7\text{I}$, have been studied competitively in the gas phase over the temperature range 18-153°C. For reaction (1) we obtain $\log A/\text{cm}^3 \text{mole}^{-1} \text{S}^{-1} = 13.5$, $E/\text{kJ mole}^{-1} = 24.8$. Using the above activation energy $D(t\text{-C}_4\text{F}_9\text{-I})$ was calculated to be 208.7 kJ mol^{-1} .